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# Small-Scale Agriculture Today

Office for Small-Scale Agriculture



## SUMMER 1993

U.S. Department of Agriculture - Cooperative State Research Service - Agricultural Research For A Better Tomorrow

### AT ISSUE...FORESIGHT AND PERCEPTION

Somewhat similar to the age-old controversy of "which came first, the chicken or the egg" is the ongoing issue of change or challenge. The answer in either case is analogous. Regardless of which comes first, to properly respond it takes foresight and perception. In the case of the chicken and the egg it is important in either instance that the nest be ready. And what about change or challenge?

Have you ever wondered what happened to those eight scientist types who sealed themselves up for 2 years in an oversized greenhouse over in Oracle, Arizona, in September of 1991? Well, they're doing great! The greenhouse is named Biosphere 2 and has tropical rain forest, savannah, marsh, ocean, desert, farm and human habitat ecosystems enclosed within a 3-acre airtight structure. All air, water and waste is being recycled within the transparent structure of spaceframe and glass. This 2-year closure is only the first of many planned over the hundred-year lifetime of the miniature world.

It has been said..."Successful people are people who are constantly busy doing things they don't know how to do for sure!"

And it seems the American news media delight in pointing out the latter part of this axiom.

That was the case with the Biosphere 2 experiment now in its 20th month of this, the first "closure." Sure, Jane Poynter came out for 5 hours (through an airlock) to get the tip of her finger sewed back on, about a month in. And oxygen had to be pumped in a few months back as it had been mysteriously decreasing (not leaking out). Neither occurrence compromised the experiment's mission plan.

It was a dream 9 years ago, but action on the part of many dedicated people has taken this project forward in spite of some "bad press." On September 26, 1993, eight pioneers will step out in the direct Arizona sun to the wild welcome of friends, relatives, supporters and some folks who will have egg all over their faces.

If you aren't going anywhere in particular, any road will get you there. In this day of reinvented government, paradigm shifts, total quality and change, the Biosphere 2 venture is a real lesson for us. It's really O.K. not to have the total end in sight when you start out. After all isn't life itself a journey and not a destination?

The Biospherians have shown us that eight people can both subsist on the output of half an acre of soil and small animals, recycled waste, air and water, and perpetuate life in a closed environment. They embraced the challenge and adapted to change.

What this part of the experiment can mean to the small-scale farmer should be obvious. We encourage you to follow this adventure, find out more facts and look objectively at the possibilities. Surely there are some great ideas to be picked up here. A visit to this complex may be in order to really get the spirit. The press, scientific community, and academia are having second thoughts about Biosphere 2 now and are graciously coming forward and stating their approval. They are apparently seeing it for the professional undertaking it was and is. Likewise many folks are beginning to look at small farms or small-scale agriculture as a positive attribute. And why not? For years, those who have enjoyed success have been building nests. (Comments of Howard W. (Bud) Kerr, Jr., Director, USDA Office for Small-Scale Agriculture (OSSA), May 1993)

(Note: The Space Biospheres Ventures address is Highway 77, Biosphere Road, P.O. Box 689, Oracle, AZ 85623. Contact: Chris Helms, Director of Public Affairs; telephone 602-825-6400, Fax 602-825-6471.)

*Mention of commercial enterprises or brand names does not constitute endorsement or imply preference by the U.S. Department of Agriculture.*

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## CORRECTION

There is an old saying... "open confession is good for the soul." The Spring 1993 edition of this newsletter contained several incorrect or incomplete telephone numbers and OSSA is very sorry for this occurrence. Corrected telephone numbers are listed below along with the subheadings that appeared under Topics and Technology articles.

**Audiotapes on Agriculture** - 1-800-488-5455, (Canada 1-800-356-2834)

**Power** - 717-392-0733

**Selling** - 615-320-3337

Please correct your Spring 1993 newsletter and contact these sources of information.

## TOPICS AND TECHNOLOGY

**Two New** - "Angora Goats" and "Shiitake Mushrooms" are the latest factsheets of the series "A Small-Scale Agriculture Alternative" from USDA's Office for Small-Scale Agriculture. Free, the publications contain interesting facts as well as additional sources of information. Contact: Bud Kerr, AG Box 2244, Washington, DC 20250-2244; telephone 202-401-1805; Fax 202-401-1804.

**Book** - A business book as well as a lifestyle guide, the 433-page book "Country Bound" costs \$22.95 and is full of tips and ideas for acclimating to a rural lifestyle. Contact: Marilyn Ross, Box 909, Buena Vista, CO 81211; telephone 1-800-331-8355.

**Alert** - "The long-term forecast for U.S. corn acreage is grim. Customers and competitors around the globe are raising more grain, cutting demand for America's biggest crop. Exports of corn from China and Argentina have more than doubled over three years while U.S. corn exports have shrunk." (The Wall Street Journal, April 26, 1993, p. B3)

**Colored Bell Peppers** - "In 1992 Dutch exporters shipped 12 percent more peppers to the United States than the year before, but it would have been more like 30 or 40 percent more if we had had better weather in Holland...Hein Belemann." (The Produce News, April 24, 1993, p. 9)

**Question** - What is the difference between a yam and a sweet potato? Answer is somewhere in this newsletter.

**Iowa Report** - "Trade-offs Between Water Quality and Profitability in Iowa Agriculture" examines farm policy options. Free, the report is 96 pages long. Contact: Cheryl Contant, Public Policy Center, 227 Quadrangle, University of Iowa, Iowa City, IA 52242-1192; telephone 319-335-0032.

**Tip** - Mulch garden plants to conserve soil moisture, smother weeds and keep the soil cool.

**Marketing** - Promote corn using unique corn items e.g., telephone, mailbox, patio lights, jewelry and other items. "Anything of Corn" information may be obtained by sending a stamped, self-addressed label and contacting: Richard P. Layden, Layden Farms, 11443 E. 4200 North Rd., Hoopeston, IL 60942-9506; telephone 217-283-6864.

**Truism** - "The embers of discord between nature and mankind, grass and forage, tree and timber, ever smolder."

**Small Ruminants** - The American Association of Small Ruminant Practitioners (AASRP) was organized in 1968 to further education and scientific programs in the field of small ruminants (sheep, goats, and llamas). For more information about membership, contact: Phyllis Larsen, AASRP, 1675 Ellis Hollow Rd., Ithaca, NY 14850; telephone/Fax 607-539-6181.

**Zap!** - Coming is a solar-powered electrocuting trap for house and stable flies. The traps can be used out of doors and have killed up to 2,500 flies per trap per day. For more information contact: Larry Pickens, USDA-ARS, Livestock Insects Laboratory, Bldg. 177-A, BARC-E, Beltsville, MD 20705; telephone 301-504-8274.

**Costs \$6** - A booklet containing triplicate sets, for recording spraying calibration records for reference in subsequent years and to document claims of non-performance. Contact: Bill Draper, Route 1, Box 232, Hughes, AR 72348; telephone 501-339-3733.

**California Agriculture** - The article in the March-April 1993 issue, Vol. 47 No. 2, "A Special Report on Small Farms," is outstanding! Single copy price is \$2. Contact: Janet White, Division of Agriculture and Natural Resources, University of California; 300 Lakeside Dr., 6th floor, Oakland, CA 94612-3560; telephone 510-987-0044.

**Food Stamps** - USDA encourages the public to report program violations by calling 1-800-424-9121, the phone number of USDA's Inspector General in Washington, D.C.

**Teaching Package** - "Understanding Wildlife Management" includes 100 pages of instructional materials, a 20-minute video, and three other wildlife publications, housed in a durable three-ring binder. The package (N205TG) is available for \$49.50. Contact: Ginny Burness, Cornell Instructional Materials Service, Department of Education, 420 Kennedy Hall, Ithaca, NY 14853; telephone 607-255-9252.

**Tip** - The Produce News, May 1, 1993 had a special section devoted to Specialty Produce e.g., endive, herbs, mushrooms, added value, etc.

**Newsletter** - The sustainable nursery newsletter *Hort Impact* is an 8 page monthly that also covers water quality. Checks for \$10 should be made out to the University of Connecticut. Contact: Patsy W. Evans, 1376 Storrs Rd., U-67, University of Connecticut, Storrs, CT 06269-4067; telephone 203-486-1942.



**Play It Safe** - Pesticide safety has three parts: care in handling of the product, proper selection of clothing worn, and laundering of the contaminated items.

**Needed** - Hedgerows would greatly benefit the environment in our country and could do so at little cost to anyone. For information, contact: Erik Ronneberg, Forest Resource Center, Rt. 2, Box 156A, Lanesboro, MN 55949; telephone 507-467-3583.

**Tip** - For long-lasting arrangements, cut the stems of fresh flowers early in the morning when they are filled with water. Also, select blooms that are just beginning to open, cut with a sharp knife, and immediately place in a pail of warm water.

**Shop Safety** - When using a grinder, always hold small pieces with locking pliers, never with shop cloths or gloves. And, above all, wear eye and face protection.

**Gooseberries** - North American Fruit Explorers (NAFEX) is compiling a listing of all the varieties of gooseberries being grown in the country. If you grow gooseberries, please send name of varieties or describe as best you can. Contact: E.F. Mashburn, 707 Front St., Northumberland, PA 17857; telephone 717-473-9910.

**Sunflowers** - Becoming popular as cut flowers, sunflowers are easy to grow.

**Answer** - "The true yam and the sweet potato belong to different plant families," according to Dr. Mike Cannon of the Department of horticulture of Louisiana State University in Baton Rouge. "The true yam, *Cioscorea esculenta*, is not often grown in the United States because it is not hardy north of North Carolina, but it is sometimes imported. It is a tropical plant, common in Africa, grown for its large, rough-looking edible starchy rhizomes. The familiar sweet potato, *Ipomoia batatas*, is in the morning glory family. Of Central and South American origin, it is prized for its fleshy root." (*The New York Times*, April 27, 1993, p. 10C)

**Honey Bees** - Since its discovery in the United States in 1987, the Varroa mite has destroyed colonies of bees in 45 States. However, in the near future honey bees that resist mite attack will be available. Contact: Thomas E. Rinderer, USDA-ARS, Honey Bee Breeding, Genetics and Physiology Research Lab, 1157 Ben Hur Road, Baton Rouge, LA 70820; telephone 504-766-6064.

**Stay Calm** - If bees are near you, act calm. Never swat at the bees; flailing only agitates. Move away slowly!

**Citrus Surplus** - "Here is a juicy tidbit: Maybe you've noticed the oranges, grapefruits and other citrus fruits you're buying lately seem cheaper and tastier than ever. The reason is a bumper crop of citrus this year." (*USA Today*, April 15, p. 6D)

**Careful** - This is the season for ticks and they may be carrying Lyme Disease or Rocky Mountain spotted fever. Be aware!

**Book** - "Lyme Disease Patient/Physician Perspectives" is a tool for people interested in expanding their awareness of this disease and is available for \$13.95. Contact: Joe Deden, Lyme Disease Education Project, Inc., P.O. Box 55412, Madison, WI 53705; telephone 507-467-2437.

**Concept** - "Never forget that the cultivation of the earth is the most important labor of man. When tillage begins, other arts follow. The farmers, therefore, are the founders of civilization" ...Daniel Webster.

**Don't Smoke** - Since tobacco mosaic virus is transmitted by direct contact, wash your hands and tools before touching tomato plants. Do not smoke while handling the plants!

**Caution** - In the 1930's, the lifetime risk of developing melanoma, the deadliest of all skin cancers, was 1 in 1,500. Today, the lifetime risk is 1 in 20. The American Cancer Society estimates that 32,000 new cases will be diagnosed this year. For information about skin cancer prevention, contact the American Cancer Society at 1-800-227-2345.

**Seeds** - Seed Savers Exchange (SSE) is a nonprofit tax-exempt organization that is saving old-time crops from extinction. You can get an informational brochure for \$1 by contacting: Kent Whealy, SSE, 3076 North Winn Rd., Decorah, IA 52101; telephone 319-382-5990.

**How-to Guide** - Now available for \$5, "Food Stamps and Farmers' Market Promotion Manual," a guide to promotion and certification. Contact: Elizabeth Wheeler, The Hartford Food System, 509 Wethersfield Ave., Hartford, CT 06114; telephone 203-296-9325, Fax 203-296-8326.

**Newsletter** - *American Ginseng Trends* costs \$28 and is published bi-monthly. Contact: Yvonne M. Duwe, Future Concepts, Inc., P.O. Box 1982, Wausau, WI 54402-1982; telephone 715-675-4898.

## Farm Safety Rules

- Do not carry children or other passengers on a tractor.
- Do not let children play near farm machinery.
- Do not leave children unattended, and be sure to warn them about hazards on the farm.
- Do not allow children to operate a tractor until they are old enough and have been trained to operate it properly.
- If a tractor has no roll bar, install one. If it has one, don't remove it.
- Do not remove protective covers from farm equipment.
- Do not let children ride in the back of pickup trucks.

(Source, North Carolina Agriculture Extension Service)



## CALENDAR OF EVENTS

**July 10-14, 1993** - International Floriculture Industry Short Course, Cincinnati Convention Center, Cincinnati, OH. Contact: Dennis Kirven, Ohio Florists' Association, 2130 Stella Court, Suite 200, Columbus, OH 43215-1033; telephone 614-487-1117, Fax 614-487-1216.

**July 15-21, 1993** - National Association of Civilian Conservation Corps Alumni 6th Annual Reunion/Convention. Contact: Walter F. Atwood, 3105 Greenwood Drive, Hyattsville, MD 20783; telephone 301-779-5530.

**July 24-29, 1993** - 90th Annual Meeting of the American Society for Horticultural Science, Opryland Hotel, Nashville, TN. Contact: Carl Sams, ASHS-93, Department of Plant and Soil Science, University of Tennessee, P.O. Box 1071, Knoxville, TN 37901-1071; telephone 615-974-8818.

**August 2-12, 1993** - International Training Program in New Crops: Aromatic and Medicinal Plants, Purdue University, West Lafayette, IN. Contact: Kathy Hyman, 1586 Stewart Center, Room 110, West Lafayette, IN 47907-1586; telephone 317-494-2758, Fax 317-494-0567.

**August 11-14, 1993** - The American Cheese Society's 10th Annual Conference, Shelburne Farms, Burlington, VT. Contact: Allison Hooper, c/o Food Work, 34 Downing Street, New York, NY 10014; telephone 212-727-7939.

**August 12-15, 1993** - 2nd International Master Gardener Conference and Trade Show, Rivercenter Marriott. Contact: Bonnie Hammett, 1143 Coliseum Rd., San Antonio, TX 78219; telephone 210-228-0417.

**August 15-18, 1993** - The Third North American Agroforestry Conference, Iowa State University, Ames, IA. Contact: Richard C. Schultz, 251 Bessey Hall, Department of Forestry, Iowa State University, Ames, IA 50011-1021; telephone 515-294-7602, Fax 515-294-1337.

**August 21, 1993** - 2nd Annual Sunflower Festival, Wahpeton, ND/Breckenridge, MN. Contact: Jane Priebe, Visitors Center, 120 4th St., Wahpeton, ND 58075; telephone 1-800-892-6673.

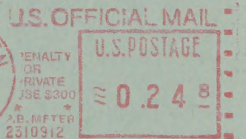
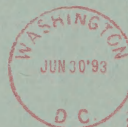
**September 7-9, 1993** - 3rd International Federation of Organic Agriculture Movements (IFOAM) "Trade in Organic Foods" Conference, Baltimore Convention Center, Baltimore, MD. Contact: Karen Weinzierl, New Hope Communications, 1301 Spruce St., Boulder, CO 80302; telephone 303-939-8440, Fax 303-939-9559.

**September 14-16, 1993** - Big Iron Farm Show and Exhibition, Red River Valley Fairgrounds, West Fargo, ND. Contact: Bruce Olson, Red River Valley Fairgrounds, Box 797, West Fargo, ND 58078; telephone 701-282-2200.

**September 18-19, 1993** - North Country Fiber Fair Seminar and Workshop, Valley City, ND. Contact: Kim Owen, P.O. Box 343, Valley City, ND 58072; telephone 701-845-2544.

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